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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/758,380

01/15/2004

Memphis-Zhihong Yin

200312170-1

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06/21/2006

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EXAMINER

WRIGHT, INGRID D

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

11A

**Office Action Summary**

Application No.

10/758,380

Applicant(s)

YIN ET AL.

Examiner

Ingrid Wright

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7,11,22,30 and 35-51 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 7,11,22,30 and 35-51 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) ☐ Notice of Informal Patent Application (PTO-152)  
 6) ☒ Other: 4 Attachments.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis US 5689654.

Note: See attached fig. 22 of Kikinis for elements representing claimed limitations in the instant application.

With respect to claim 11, Kinkinis et al. teaches (see, fig. 5) a computer (172) comprising an internal device bay (105) with an electrical connector (26) disposed therein and a multi-functional device (10) insertable in the internal device bay (105) and connectable to the electrical connector (26), and wherein the multifunctional device (10) has a first set of functions (see, col. 11, lines 25-35) when the multifunctional device (10) is inserted into the internal device bay and connected to the electrical connector (26) and a second set of functions (see, col. 11, lines 25-35) when removed from the internal device bay (105), when the multi-functional device (10) is inserted into the internal device bay (105) and connected to the electrical connector (26), the multi-functional device (10) has a side that is accessible externally of the computer in accordance

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at least part of the first set of functions, interface elements are exposed on the externally accessible side for use when the multi-functional device (10) is inserted into the internal device bay (105) and when the multi-functional device (10) is removed from the internal device bay (105) and the interface elements comprise an eject button (1079) and two other interface elements (see, notation on attached fig. 23 of Kikinis et al.) e(see, col. 21, lines 53-57 & attached fig. 22 of Kikinis et al.).

Although, Kikinis et al. teaches the interface elements as mentioned above, Kikinis et al. is silent as to an additional volume control dial, a headphone jack or a tuner knob.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an additional interface element in the invention of Kikinis et al., in order to expand the capabilities of the computer device.

2. Claims 7,22,30,35-40 & 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis et al. US in view of 5689654 Bell et al. 7054965 B2,

Note: See attached fig. 4,5A,5D & 8B of Bell et al. for elements representing claimed limitations in the instant application.

With respect to claim 7, Kikinis et al. teaches (see, fig. 5) a computer (172), comprising an internal device bay (105) with an electrical connector (26) disposed therein and a multi-functional device (10) insertable in the internal device bay (105) and connectable to the electrical connector (26) and wherein, the multi-functional device (10) has a first set of functions (see, col. 11, lines 25-35) when the multi-functional device (10) is inserted into the internal device by and connected to the electrical connector (26) and a second set of functions (see, col. 11, lines 25-35) when removed from the internal device bay (105) and the multifunctional device (10).

Kikinis et al. lacks at least a video player, a DVD player, a television, a CD player, an MP3 player, a tape player or a radio.

Bell et al. teaches (see, fig. 4,5A,5D of Bell et al.) a detachable multifunctional device comprising a DVD player for a portable computer (see, fig. 8B of Bell et al.), for allowing a user to reduce the cost of acquiring multiple mobile devices and to aid in eliminating the need to transport multiple handheld devices of various sizes and weights (see, col. 6, lines 44-55 & col. 16, lines 36-38 of Bell et al.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the DVD player of Bell et al. in the invention of Kikinis et al., in order to provide a means of allowing a user to reduce the cost of acquiring multiple mobile devices and to aid in eliminating the need to transport multiple handheld devices of various sizes and weights (see, col. 6, lines 44-55 & col. 16, 36-38 of Bell et al.).

With respect to claim 22, Kikinis et al. teaches a multi-functional device (10) that can be connected to a personal electronic system (172) having an internal device bay (105) comprising a body insertable at least partially into the internal device bay (105) of the personal electronic system (172), a mating electrical connector (26) adapted to connect to the electrical connector (26) of the personal electronic system (172) upon inserting the multi-functional device (10) into the internal device bay (105) and at least a video player and wherein the multi-functional device (10) operates in a second functional capacity when removed from the personal electronic system (172).

Kikinis et al. lacks at least a video player, a DVD player, a television, a CD player, an MP3 player, a tape player or a radio.

Bell et al. teaches (see, fig. 4,5A,5D of Bell et al.) a detachable multifunctional device comprising a DVD player for a portable computer (see, fig. 8B of Bell et al.), for allowing a user to reduce the cost of acquiring multiple mobile devices and to aid in eliminating the need to transport multiple handheld devices of various sizes and weights (see, col. 6, lines 44-55 of Bell et al.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the DVD player of Bell et al. in the invention of Kikinis et al., in order to provide a means of allowing a user to reduce the cost of acquiring multiple mobile devices and to aid in

eliminating the need to transport multiple handheld devices of various sizes and weights (see, col. 6, lines 44-55 of Bell et al.).

Regarding the method claim 30, the method steps in the claim are necessitated by the device structure as taught by Kikinis et al. and Bell et al. Kikinis et al. disclosed a multi-functional device (10) which comprised a multi-functional device (10) electrically connected to a personal electronic system (172), in which the multi-functional device (10) was partially inserted into an internal device bay (105) of the personal electronic system (172), the multi-functional device (10) operated in a first functional capacity when the multifunctional device is inserted in the internal device bay (105) of the personal electronic system (172), the device electrically disconnected from the personal electronic system (172) by, in which the device is removed from the internal bay of the personal electronic system (172) and the multi-functional device (10) operated in a second functional capacity when the multi-functional device (10) is remove form the personal electronic system (172) and a DVD player (see, col. 16, 36-38 of Bell et al.).

With respect to claim 35, Kikinis et al. teaches a display screen, an internal device bay (105) with an electrical connector (26) disposed therein.

Kikinis lacks a camera insertable in the internal device bay and connectable to the electrical connector and having a camera lens; and wherein the camera has a first set of functions when the camera is inserted into the internal device bay and connected to the electrical connector and a second set of functions when removed from the internal device bay; the first set of functions

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includes transferring captured image content to the computer; and the second set of functions includes capturing image content through the camera lens.

Bell et al. teaches a camera (see, col. 9, lines 6-9 of Bell et al.) insertable in an internal device bay (834) and connectable to an electrical connector () and having a camera lens (inherent to a camera); and wherein the camera (see, col. 9, lines 6-9 of Bell et al.) has a first set of functions when the camera (see, col. 9, lines 6-9 of Bell et al.) is inserted into the internal device bay (834) and connected to the electrical connector (438,520) and a second set of functions when removed from the internal device bay (834), the first set of functions includes transferring captured image content to the computer (806b); and the second set of functions includes capturing image content through the camera lens (inherent to a camera)., for expanding the capabilities of the computer system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the digital camera as taught by Bell et al., in the invention of Kikinis, in order to provide a means of expanding the capabilities of the computer system.

With respect to claim 36, Bell et al. teaches a camera (see, col. 9, lines 6-9 of Bell et al.), which comprises a still image camera.

With respect to claim 37, Bell et al. teaches a camera (see, col. 9, lines 6-9 of Bell et al.) and video capture devices (see, col. 8, lines 61-67 & col. 9, 1-9 of Bell et al.).



With respect to claim 38, Smith teaches a camera (see, col. 9, lines 6-9 of Bell et al.) and video capture devices (see, col. 8, lines 61-67 & col. 9, 1-9 of Bell et al.).

With respect to claim 39, Bell et al. teaches (see, fig. 8B) a computer, comprising: a display screen (828); an internal device bay (834) with an electrical connector (438,520) disposed therein, and a video device (402a,402d) insertable in the internal device bay (838) and connectable to an electrical connector (438,520) and having a display screen (408), and wherein: the video device (402a,402d) has a first set of functions when the video device (402a,402d) is inserted into the internal device bay (834) and connected to the electrical connector (438,520) and a second set of functions when removed from the internal device bay (834); the first set of functions includes playing video content through the display screen of the computer (828); and the second set of functions includes playing the video content through the display screen (408) of the video device (402a,402d).

With respect to claim 40, Bell et al. teaches (see, fig. 2) a computer wherein the video device comprises a DVD player (402a,402d) and a storage aperture (528) through which a DVD disk (530) containing the video content can be inserted into the DVD player (402a,402d).

With respect to claim 42, Bell et al. teaches a computer (see, col. 20, lines 28-30 of Bell et al.), comprising: a speaker (inherent), an internal device bay (834) with an electrical connector (438) disposed therein, and a MP3 player (402a) insertable in the internal device bay (834) and

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connectable to an electrical connector (438) and having a speaker (410), and wherein: the MP3 player (402a) has a first set of functions when the MP3 player (402a) is inserted into the internal device bay (834) and connected to an electrical connector (438) and a second set of functions when removed from the internal device bay (834); the first set of functions includes playing MP3 content through the speaker (410) of the computer, and the second set of functions includes playing the MP3 content through the speaker (410) of the MP3 player (402a).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 43-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Bell et al. Us 7054965 B2.

With respect to claim 43, Bell et al. teaches a camera (see, col. 9, lines 6-9 of Bell et al.) that can be connected to a personal electronic system (800b) having an internal device bay (834) and an electrical connector (438,520) accessible within the internal device bay (834), comprising: a body insertable at least partially into the internal device bay (834) of the personal electronic

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system (10), a mating electrical connector adapted to connect to the electrical connector (438,520) of the personal electronic system (10) upon inserting the camera (see, col. 9, lines 6-9 of Bell et al.) into the internal device bay (834); and a camera lens (inherent to a digital camera); and wherein: the camera (see, col. 9, lines 6-9) operates in a first functional capacity when inserted at least partially into the internal device bay (834) and connected to an electrical connector; the camera (see, col. 9, lines 6-9) operates in a second functional capacity when removed from the personal electronic system (806b), the first set of functions includes transferring captured image content to the personal electronic system (806b), and the second set of functions includes capturing image content through the camera lens (inherent to a digital camera).

With respect to claim 44, Bell et al. teaches a camera (see, col. 9, lines 6-9 of Bell et al.), further comprising a still image camera (see, col. 9, lines 6-9 of Bell et al.).

With respect to Claim 45, Bell et al. teaches a camera (see, col. 9, lines 6-9 of Bell et al.) and video capturing devices (see, col. 8, lines 62-67 & col., 1-9 of Bell et al.).

With respect to claim 46, Bell et al. teaches a camera (see, col. 9, lines 6-9 of Bell et al.) and video capturing devices (see, col. 8, lines 62-67 & col., 1-9 of Bell et al.).

With respect to claim 47, Bell et al. teaches a video device (402a,402d) that can be connected to a personal electronic system (802b) having an internal device bay (834), an electrical

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connector (438) accessible within the internal device bay (834) and a display screen (828), comprising: a body insertable at least partially into the internal device bay (834) of the personal electronic system (802b), a mating electrical connector adapted to connect to the electrical connector (438) of the personal electronic system (802b) upon inserting the video device (402a,402d) into the internal device bay (834); and a display screen (828), and wherein: the video device (402a,402d) operates in a first functional capacity when inserted at least partially into the internal device bay (834) and connected to the electrical connector (); the video device (802a,802b) operates in a second functional capacity when removed from the personal electronic system (802b), the first set of functions includes playing video content through the display screen of the personal electronic system (802b), and the second set of functions includes playing the video content through the display screen (828) of the video device (402a,402d).

With respect to claim 48, Bell et al. teaches a video device (402a,402d) comprising: a DVD player (402a), and a storage media aperture (528) through which a DVD disk (530) containing the video content can be inserted into the DVD player (402a,402d).

With respect to claim 49, in regards to all the limitations of claim 47 above, Belle et al. teaches a video device (402a,402d).

Although, Belle et al. teaches that game players (see, col. 6, lines 11-18 of Bell et al.) are commonly used in portable computer systems that are also specialized “media readers,” and a personal electronic system (802b) and a video device (402a,402d) with a display screen (408), and the capabilities of playing game content, he is silent as to the actual embodiment.

It would have been obvious to one of ordinary skill in the art the time the invention was made to utilize a game player in the invention of Bell et al., in order to expand the capabilities of the computer system.

4. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al. 7054965 B2.

With respect to claim 49, in regards to all the limitations of claim 47 above, Belle et al. teaches a video device (402a,402d).

Although, Belle et al. teaches that game players (see, col. 6, lines 11-18 of Bell et al.) are commonly used in portable computer systems that are also specialized “media readers,” and a personal electronic system (802b) and a video device (402a,402d) with a display screen (408), and the capabilities of playing game content, he is silent as to the actual embodiment.

It would have been obvious to one of ordinary skill in the art the time the invention was made to utilize a game player in the invention of Bell et al., in order to expand the capabilities of the computer system.

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5. Claim 41 & 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis et al. US in view of 5689654 Bell et al. 7054965 B2, further in view of Choi US 5740012.

With respect to claim 41, in regards to all the limitations of claim 39 above, Bell et al. teaches a video device (165).

Bell et al. lacks a video device, which comprises a television, the first set of functions includes playing televised content through the display screen of the computer; and the second set of functions includes playing the televised content through the display screen of the video device.

Choi teaches a video device, which comprises a television (see, col. 3, lines 39-50), a first set of functions includes playing televised content through a display screen of a computer; and a second set of functions includes playing the televised content through a display screen of a video device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the video device of Choi, in the invention of Bell et al., in order to provide a means of manual insertion of modular peripheral unit into a computer (see, col. 3, lines 39-50 of Choi).

With respect to claim 50, in regards to all the limitations of claim 47 above, Bell et al. teaches a video device (402a,402d).

Bell et al. lacks a video device, which comprises a television, wherein: the first set of functions includes playing televised content through the display screen of the personal electronic system, and the second set of functions includes playing the televised content through the display screen of the video device.

Choi teaches a video device, which comprises a television (see, col. 3, lines 39-50) and wherein: the first set of functions includes playing televised content through the display screen of the personal electronic system, and the second set of functions includes playing the televised content through the display screen of the video device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the video device of Choi, in the invention of Belle et al., in order to provide a means of manual insertion of modular peripheral unit into a computer (see, col. 3, lines 39-50 of Choi).

#### ***Response to Arguments***

6. Applicant's arguments, filed 3/31/06, have been full considered, but art moot in view of the new ground (s) of rejection.

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In regards to the applicant's remarks, the new references Bell et al. US 7054965 B2, Choi US 5740012 and Smith, II US 5768163 teaches the limitations missing in Kikinis et al. US 5689654 reference.

With respect to Applicant's argument, regarding the PDA of Kikinis not having additional interface elements, the Examiner notes that Kikinis et al. teaches an interface element (1079) located on an external side of the (1061) (see, notation on attached fig. 23 of Kikinis.).

With respect to Applicant's argument, regarding Tanaka et al., not having a video device, the Examiner notes that Bell et al. is relied upon to teach a video device (402a,402d) that is inserted in an aperture (834) of a portable computer system (802b).

With respect to Applicant's arguments, regarding Tanaka et al. not having a video device, the Examiner notes that Bell et al. is relied upon to teach a video device (402a,402d) for playing video.

With respect to Applicant's arguments, regarding the combining of Tanaka et al. and Kikinis et al., the Examiner notes that Kikinis et al. and Bell et al. are combined because they are in the same field of endeavor (computer systems with detachable PDA devices).



With respect to Applicant's argument, regarding Tanaka et al. not teaching a MP3 player, the Examiner notes that Bell et al. is relied upon to teaches a MP3 player (402a) utilized in a portable computer system (802b).

*Conclusion*

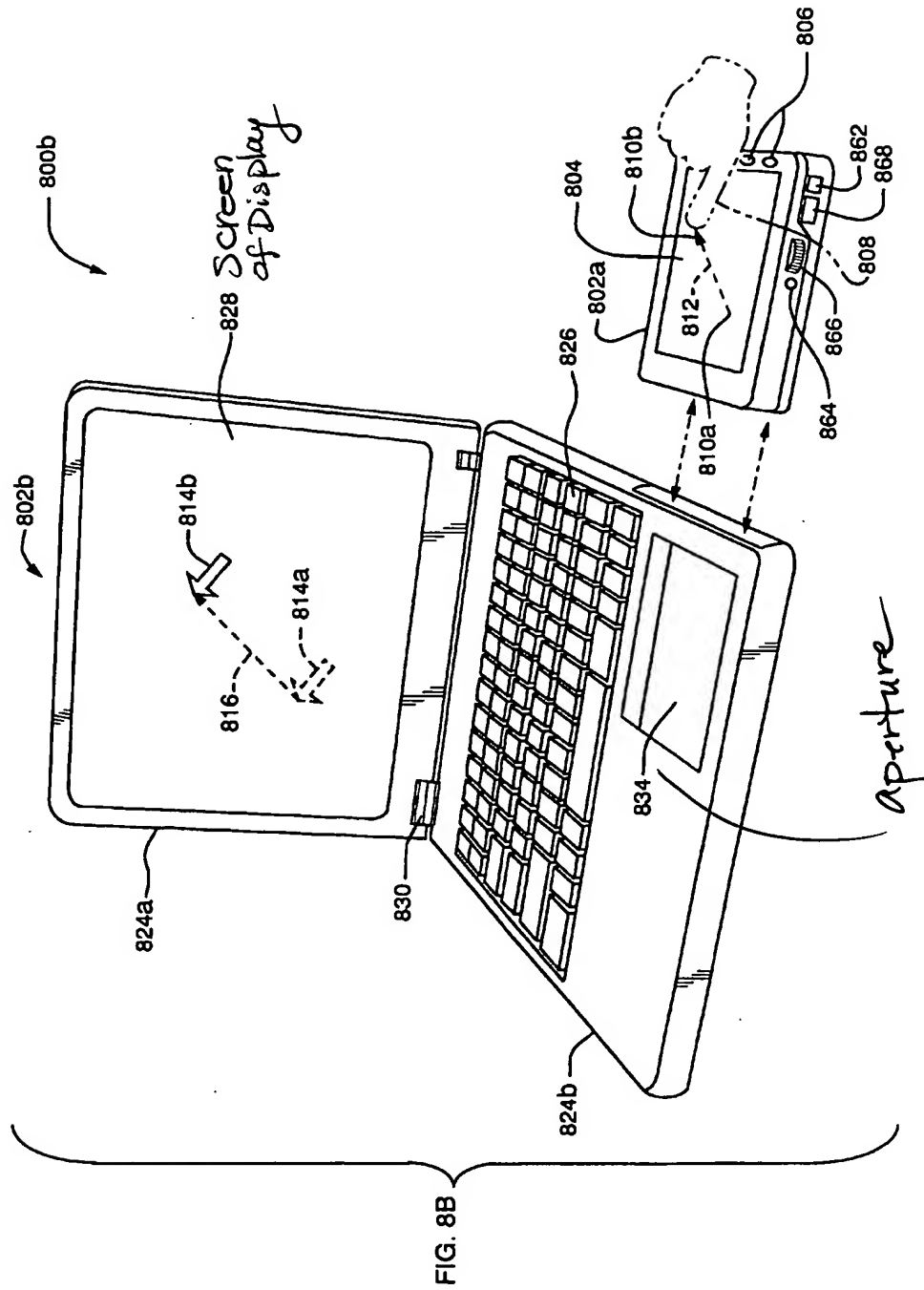
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Hagiwara US 7014484 B2 shows the state of the art regarding electronic devices with expandable electronic apparatus.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571)272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
LYNN FEILD  
SUPERVISORY PATENT EXAMINER



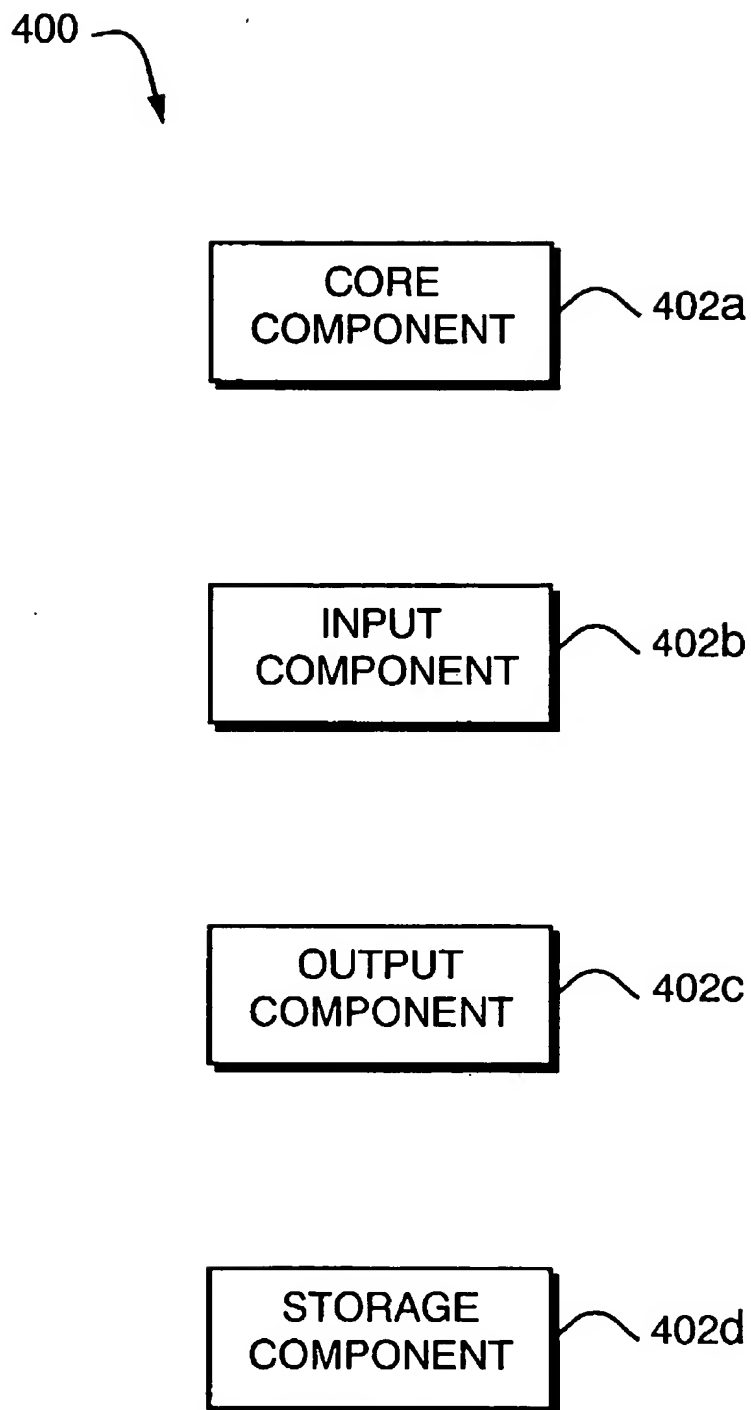


FIG. 4

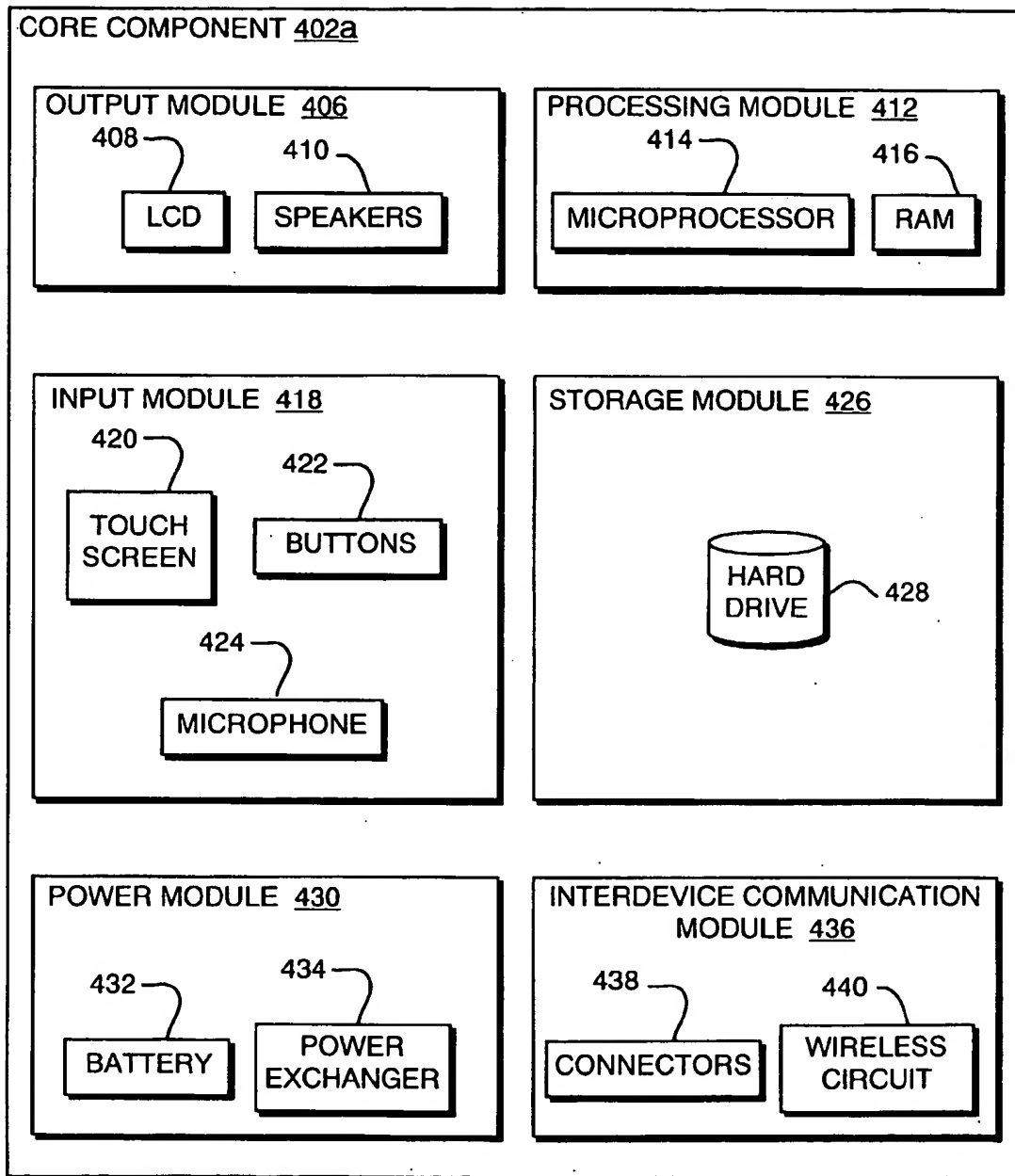


FIG. 5A

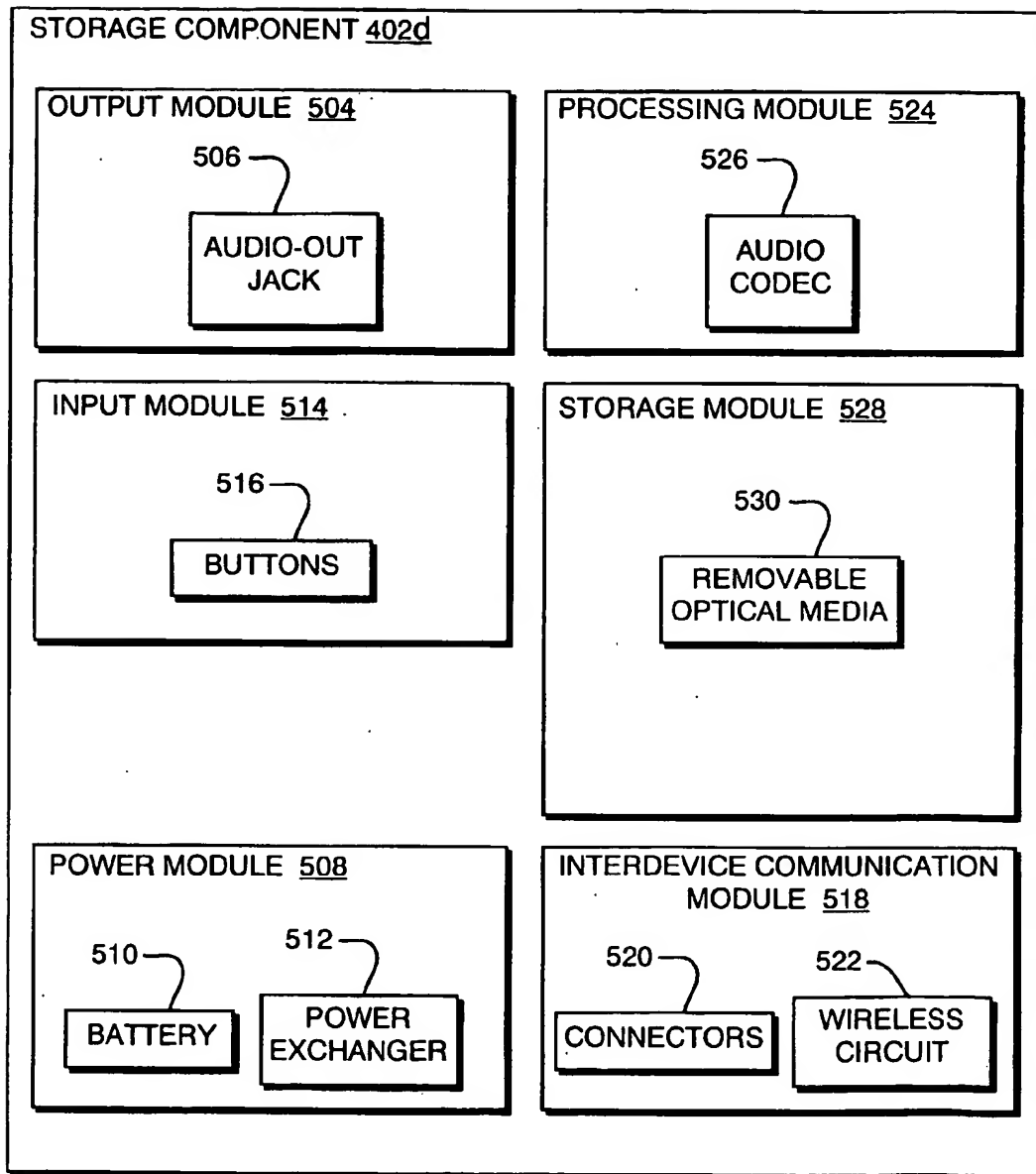


FIG. 5D

